

ABSTRACT OF THE DISCLOSURE

A method and a system for transforming between one or more point type sources and a line source in a transmission line structure. A transmission line path controller is inserted between a first parallel-plate waveguide section and a second parallel-plate waveguide section. The transmission line path controller comprises a curved side to which one end of each waveguide is coupled. The transmission line path controller further comprises a waveguide slot, one side of which is a part of the curved side, coupling the waveguide ends that are coupled to the transmission line path controller. The ends of the waveguides that are not coupled to the transmission line path controller forms the point type source and the line source, respectively.